

PTO-1449		Application No. 10/706,637		Applicant(s) Jacques C.S. Kools et al.				
Information Disclosure Citation in an Application FEB 18 2005 U.S. PATENT & TRADEMARK OFFICE		Docket Number 021208.0247		Group Art Unit 2822	Filing Date November 12, 2003			
		U.S. PATENT DOCUMENTS						
	DOCUMENT NO.	DATE	NAME	CLASS	SUBCLASS	FILING DATE		
28	A.	5616177	4/1/1997	Yamada	117	102		
	B.	5879459	3/09/1999	Gadgil et al.	118	715		
	C.	5916365	6/29/1999	Sherman	117	92		
	D.	5930046	7/27/1999	Solberg et al.	359	580		
	E.	5944964	8/31/1999	Solberg et al.	204	192.26		
	F.	6015590	1/18/2000	Suntola et al.	427	255.23		
	G.	6144060	11/7/2000	Park et al.	257	310		
	H.	6174377	1/16/2001	Doering et al.	118	729		
	I.	6200893	3/13/2001	Sneh	438	685		
	J.	6200866	3/13/2001	Ma et al.	438	299		
	K.	2001/0024387	9/27/2001	Raaijmakers et al.	365	200		
	L.	6319439	11/20/2001	Lee et al.	264	81		
	M.	6335240	1/1/2002	Kim et al.	438	253		
	N.	6342277	1/29/2002	Sherman	427	562		
70	O.	2002/0013487	1/31/2002	Norman et al.	556	7		
FOREIGN PATENT DOCUMENTS								
		DOCUMENT NO.	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
							YES	NO
38	P.	62221102	09/29/1987	JP (with English abstract)	H01F	41/14		X
	Q.	00/38191	06/29/2000	WO	G11C	11/15	X	
	R.	02/09126	01/31/2002	WO	H01F	10/32	X	
	S.	02/09158	01/31/2002	WO	H01L	21/00	X	
71	T.	01/88972	11/22/2001	WO	H01L	21/321	X	
NON-PATENT DOCUMENTS - DOCUMENT (Including Author, Title, Source, and Pertinent Pages)								
79	U.	Addison, C.C. et al. "The Vapour Pressure of Anhydrous Copper Nitrate, and its Molecular Weight in the Vapour State", <i>J. Chem. Soc.</i> , pp. 3099-3106						1958
	V.	Akerman, J.J et al., "Identifying Tunneling in Ferromagnetic-Insulator-Ferromagnetic Thin Film Structures", World-wide web, physics.ucsd.edu/iksgp/Tunneling.html, pp. 1-6,						Printed 02/04/2002
	W.	Bobo, J.F. et al., "Spin-dependent Tunneling Junctions with Hard Magnetic layer Pinning", <i>Journal of Applied Physics</i> , vol. 83, No. 11, pp. 6685-6687						1998
	X.	Daughton, J.M., World-wide web nve.com/otherbiz/mram2.pdf, "Advanced MRAM Concepts", pp. 1-6						02/07/2001
71	Y.	Fereday, R.J. et al., "Anhydrous Cobalt (III) Nitrate", <i>Chemical Communications</i> , pp. 271						1968
EXAMINER <i>H. P. ...</i>					DATE CONSIDERED <i>6/22/05</i>			
EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP § 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to the applicant.								

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U.S. PATENT DOCUMENTS							
		DOCUMENT NO.	DATE	NAME	CLASS	SUBCLASS	FILING DATE
✓	A.	6358632	3/19/2002	Dickey et al.	428	690	11/10/98
	B.	2002/0041931	4/11/2002	Suntola et al.	427	255.28	5/14/01
	C.	6391785	5/21/2002	Satta et al.	438	704	8/23/00
	D.	6416577	7/9/2002	Suntola et al.	117	88	06/07/00
	E.	6420230	7/16/2002	Derderian et al.	438	255	8/31/00
	F.	2002/0106846	8/8/2002	Seutter et al.	438	200	2/2/01
	G.	2002/0106846	8/8/2002	Seutter et al.	438	200	2/2/01
	H.	2002/0108570	8/15/2002	Lindfors	118	715	4/16/01
	I.	6441417	8/27/2002	Zhang et al.	257	295	3/28/01
	J.	6444495	9/3/2002	Leung et al.	438	118	1/11/01
	K.	6447607	9/10/2002	Soininen et al.	117	200	12/27/00
	L.	6448192	9/10/2002	Kaushik	438	785	4/16/01
	M.	6451119*	9/17/2002	Sneh et al.	118	715	11/29/00
	N.	6451695	9/17/2002	Sneh	438	685	12/22/00
	O.	2002/0137260	9/26/2002	Leung et al.	438	118	1/11/01
✓	P.	2002/0140103	10/3/2002	Kloster et al.	257	767	3/28/01

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	Q.						YES NO
	R.						

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✓	S.	Hsalo, R., "Fabrication of Magnetic Recording Heads and Dry Etching Head Materials", IBM Journal of Research and Development, vol. 43, (1/2):1999, pp. 89-102					1999
	T.	Imai, Takuji, World-wide web nikkeibp.asiabiztech.com/nea/200008/tech_108675.html , "100 Gbit/Inch HDD Just Around the Corner", pp. 1-6					08/2000
	U.	Nilsen, O et al, "Thin Film Deposition of lanthanum Manganite Perovskite by the ALE Process", <i>Journal of Materials Chemistry</i> , vol. 9, pp. 1781-1784.					1999
	V.	Pakrad, C.D., "Pure Tech: Growth of MR/GMR Head Materials," World-wide web, puretechinc.com/tech_papers/tech_papers-4.htm , pp. 1-2					1999
	W.	Riihela et al., "Low Temperature Deposition of AlN Films by an Alternate Syppy of Trimethyl Aluminum and Ammonia" Chemical Vapor Deposition, 2 (6): pp. 277-283.					1996
✓	X.	Suntola, Tuomo; <i>Handbook of Crystal Growth</i> , vol. 3, Thin Films and Epitaxy, Part B: Growth Mechanisms and Dynamics, Chapter 14, pp. 601-663, Hurlie, ed. Elsevier Science B.V.					1994

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24	A.	6464779	10/15/2002	Powell et al.	117	89	1/19/01
	B.	6475910	11/5/2002	Sneh	438	685	9/22/00
	C.	6475276	11/5/2002	Elers et al.	117	84	10/13/00
	D.	6482262	11/19/2002	Elers et al.	117	84	10/13/00
	E.	6482740	11/19/2002	Soininen et al.	438	686	5/15/01
	F.	2002/0187084	12/12/2002	Lindfors et al.	422	177	7/24/02
	G.	6503330	1/7/2003	Sneh et al.	118	715	12/22/99
	H.	6506352	1/14/2003	Lindfors et al.	423	240	7/20/00
	I.	6524952	2/25/2003	Srinivas et al.	438	649	6/20/00
	J.	6540838	4/1/2003	Sneh et al.	118	715	6/28/02
	K.	6548424	4/15/2003	Putkonen	438	785	4/16/01
	L.	6551406	4/22/2003	Kilpi	118	728	12/27/00
	M.	6562140	5/13/2003	Bondestam et al.	118	715	5/10/00
	N.	2003/0096468	5/22/2003	Soininen et al.	438	200	11/19/02
	O.	6572705	6/3/2003	Suntola et al.	118	702	1/14/00
30	P.	2003/0101927	6/5/2003	Raaijmakers	117	200	12/10/02

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							YES	NO
	Q.							

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24	R.	Ueno et al., "Cleaning of CHF ₃ , plasma-etched SiO ₂ /SiN/Cu via Structures Using a Hydrogen Plasma, an Oxygen Plasma and Hexafluoroacetylacetone Vapors," <i>J. Vac. Sci. Technology B</i> , vol. 16, No. 6, pp. 2986-2995.					Nov./Dec. 1998	
	S.	Utraiainen, et al., "Studies of Metallic Film Growth in an Atomic Layer Epitaxy reactor Using M(acac) ₂ (M=Ni, Cu, Pt) Precursors", <i>Applied Surface Science</i> , vol. 157, pp. 151-158.					2000	
	T.	Wang, Shan X., "Advanced Materials for Extremely High Density Magnetic Recording Heads," Department of Electrical Engineering, Stanford University, Stanford, CA 94305-4045, presentation.					no date available	
	U.	World-wide web, megahaus.com/tech/westerndigital/shitepapers/gmr_wp.shtml., "GMR Head Technology: Increased Areal Density and Improved Performance Areal Density," pp. 1-4.					02/2000	
	V.	World-wide web, pcguide.com/ref/hdd/op/heads/techGMR-c.html, "Giant Magnetoresistive (GMR) Heads", pp. 1-4.					Printed 12/18/2004	
	W.	World-wide web, semiconductor.net/semiconductor/issues/issues/1998/feb98/docs/emerging.asp, "GMR Read-Write Heads Yield Data Storage Record," pp. 1-2.					02/1998	
30	X.	World-wide web, stoner.leeds.ac.uk/research/gmr.htm, "Giant Magnetoresistance (GMR) Heads", pp. 1-6.					Printed 02/04/2002	

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		DOCUMENT NO.	DATE	NAME	CLASS	SUBCLASS	FILING DATE
24	A.	6579374	6/17/2003	Bondestam et al.	118	725	1/25/01
	B.	2003/0121469	7/3/2003	Lindfors et al.	117	105	10/11/02
	C.	6599572	7/29/2003	Saanila et al.	427	249.18	1/18/01
	D.	2003/0140854	7/31/2003	Kilpi	118	715	2/13/03
	E.	6602784	8/5/2003	Sneh	438	680	8/6/02
	F.	2003/0150385	8/14/2003	Bondestam et al.	118	722	3/6/03
	G.	6616986	9/9/2003	Sherman	427	562	10/9/01
	H.	6620723	9/16/2003	Byun et al.	438	627	6/27/00
	I.	6627268	9/30/2003	Fair et al.	427	533	5/3/01
	J.	2003/0183171	10/2/2003	Sneh et al.	118	724	3/27/03
	K.	6630401	10/7/2003	Sneh	438	680	8/6/02
	L.	6630030	10/7/2003	Suntola et al.	118	728	1/4/00
	M.	6632279	10/14/2003	Ritala et al.	117	101	10/13/00
	N.	6635965	10/21/2003	Lee et al.	257	758	10/9/01
	O.	6638862	10/28/2003	Sneh	438	685	8/6/02
	P.	6638859	10/28/2003	Sneh et al.	438	680	9/27/02
	Q.	6638810	10/28/2003	Bakli et al.	438	240	11/5/01
	R.	6652924	11/25/2003	Sherman	427	576	5/24/01
	S.	6660126	12/9/2003	Nguyen et al.	156	345.34	3/2/01
	T.	6664192	12/16/2003	Satta et al.	438	704	4/15/02
	U.	2004/0005753	1/8/2004	Kostamo et al.	438	222	3/20/03
	V.	2004/0007171	1/15/2004	Ritala et al.	117	89	7/10/03
34	W.	6679951	1/20/2004	Soininen et al.	148	240	11/13/01
FOREIGN PATENT DOCUMENTS							
		DOCUMENT NO.	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION
	X.						YES NO
NON-PATENT DOCUMENTS - DOCUMENT (Including Author, Title, Source, and Pertinent Pages)							
	Y.						
	Z.						
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U.S. PATENT DOCUMENTS							
		DOCUMENT NO.	DATE	NAME	CLASS	SUBCLASS	FILING DATE
78	A.	6689210	2/10/2004	Soininen et al.	117	89	7/24/02
	B.	6720260	4/13/2004	Fair et al.	438	680	6/20/03
	C.	2004/0076837	4/22/2004	Hein et al.	428	446	10/22/02
	D.	2004/0076751	4/22/2004	Sherman	427	255.34	10/10/03
	E.	6727169	4/27/2004	Raaijmakers et al.	438	622	8/23/00
	F.	2004/0083949	5/6/2004	Sherman	117	84	10/22/03
	G.	6734020	5/11/2004	Lu et al.	436	55	3/7/01
	H.	2004/0121616	6/24/2004	Satta et al.	438	778	12/8/03
	I.	6759081	7/6/2004	Huganen et al.	427	58	4/30/02
	J.	2004/0130029	7/8/2004	Raaijmakers et al.	257	758	12/15/03
	K.	6764546	7/20/2004	Raaijmakers	117	93	12/10/02
	L.	6767582	7/27/2004	Elers	427	253	10/12/00
	M.	6777353	8/17/2004	Putkonen	438	785	4/8/03
	N.	2004/0161636	8/19/2004	Hujanen et al.	428	692	2/17/04
	O.	6794287	9/21/2004	Saanila et al.	438	674	3/20/03
	P.	6800173	10/5/2004	Chiang et al.	156	345.33	7/9/01
	Q.	6800552	10/5/2004	Elers et al.	438	680	9/17/02
	R.	2004/0202786	10/14/2004	Wongsenakhum et al.	427	250	3/31/04
	S.	6811814	11/2/2004	Chen et al.	427	248.1	1/16/02
	T.	6818067	11/16/2004	Doering et al.	118	715	4/15/02
78	U.	6821889	11/23/2004	Elers et al.	438	680	7/30/02

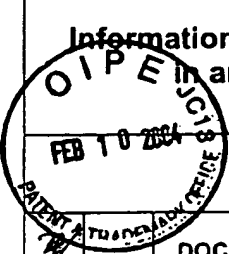
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		DOCUMENT NO.	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION
	V.						YES NO
	W.						
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NON-PATENT DOCUMENTS - DOCUMENT (Including Author, Title, Source, and Pertinent Pages)		
	Y.	
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21	A.	5647911	07/15/97	Vanell et al.	118	715	12/14/93
	B.	5711811	01/27/98	Suntola et al.	118	711	11/28/95
	C.	5916369	06/29/99	Anderson et al.	118	715	06/07/95
	D.	6387185 B2	05/14/02	Doering et al.	118	729	01/16/01
	E.	2003/0003635 A1	01/02/03	Paranjpe et al.	438	149	05/23/01
20	F.	6511539 B1	01/28/03	Raaijmakers	117	102	09/08/99
	G.						
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							YES	NO
	L.							
	M.							
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NON-PATENT DOCUMENTS

		DOCUMENT (Including Author, Title, Source, and Pertinent Pages)	DATE
24	Q.	Omstead, Thomas, et al.; "Filling High-AR Structures Using Pulsed Nucleation Layer Deposition", Solid State Technology, Vol. 45, pp. 51-56.	09/2002
24	R.	Ritala, Mikko, et al.; "Atomic Layer Epitaxy - a Valuable Tool for Nanotechnology?", Nanotechnology, Vol. 10, pp. 19-24.	1999
	S.		
	T.		
	U.		

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20	A.	6506255	1/14/03	Kim	118	715	1/31/02
20	B.	6539891	4/1/03	Lee et al.	118	723	6/19/00
20	C.	22030116087	6/26/03	Nguyen et al.	118	715	12/21/01
	D.						
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							YES	NO
	O.							
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NON-PATENT DOCUMENTS

		DOCUMENT (Including Author, Title, Source, and Pertinent Pages)	DATE
20	R.	International Search Report, PCT US2004037172, 11 pages	Mailing Date 5/25/05
	S.		
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